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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/771,370

01/26/2001

Eric Malcolm Rives

72135

6461

27975

7590

06/22/2004

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EXAMINER

LE, LANA N

ART UNIT

PAPER NUMBER

2685

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/771,370

Applicant(s)

RIVES ET AL.

Examiner

Lana N Le

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2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-7,10,11 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 3-5, 10, 11, 14 is/are allowed.
- 6) ☒ Claim(s) 6 and 7 is/are rejected.
- 7) ☒ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pande et al in view of Jeong (US 6,532,240) and further in view of Wala (US 6,112,086).

Regarding claim 6, Pande et al discloses a loop-powered digital radio comprising:

a line interface 16 that is adapted to be coupled to a wireline communication link over which digital communication signals sourced from first digital communication equipment installed at a first site are transported, the wireline communication link also conveying electrical power for operating wireline digital communication equipment coupled thereto, the line interface being operative to extract power from the wireline communication link and interface digital telecommunication signals transported thereover (col 5, lines 20-24; lines 52-56);

a wireless transceiver 14, coupled to the line interface and being configured to wirelessly transmit and receive RF energy containing the digital telecommunication signals (col 5, lines 25-42); and

a DC-DC voltage converter coupled to the line interface and being operative to convert power extracted thereby to voltages necessary to operate the wireless transceiver (col 5, lines 43-57; col 9, lines 32-65).

Pande et al fail to further disclose the digital telecommunication signals comprise T1 rate; the line interface includes a T1 framer, and wherein the wireless transceiver includes a transmitter unit that is configured to perform modulation and up-conversion to RF of baseband T1 digital communication signals provided by the T1 framer, and a receiver unit that is configured to perform RF to baseband down-conversion and demodulation of Rf energy received thereby and containing T1 digital communication signals for application to the T1 framer.

Jeong discloses disclose the line interface includes a T1 framer (col 2, line 56-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a T1 framer in the line interface in order to route data through the line interface to the other unit.

Pande and Jeong fail to further disclose: the digital telecommunication signals comprise T1 rate; and wherein the wireless transceiver includes a transmitter unit that is configured to perform modulation and up-conversion to RF of baseband T1 digital communication signals provided by the T1 framer, and a receiver unit that is configured to perform RF to baseband down-conversion and demodulation of Rf energy received thereby and containing T1 digital communication signals for application to the T1 framer.

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Wala discloses the digital telecommunication signals comprise T1 rate (col 6, lines 25-32); and wherein the wireless transceiver includes a transmitter unit that is configured to perform modulation at 418 and up-conversion to RF at 419 of baseband T1 digital communication signals provided by the T1 framer at 404 (col 7, line 63 – col 8, line 3; fig. 4), and a receiver unit that is configured to perform RF to baseband down-conversion at 427 and demodulation of RF energy received thereby at 428 and containing T1 digital communication signals for application to the T1 framer at 404 (col 8, line 9-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a transmitter and receiver that receives and transmits digital signals via a T1 link interface in order to transmits and receives the necessary data information to and from the T1 interface.

Regarding claim 7, Pande et al further disclose the loop-powered digital radio according to claim 6 wherein the line interface 16 is adapted to be coupled to the wireline communication link at a second site ODU that is remote from the first site IDU indoor unit and provides no source of electrical power, exclusive of that conveyed by the wireline link, that is sufficient to operate the radio.

***Allowable Subject Matter***

1. Claims 1, 3-5, 10, and 14 are allowable over the cited prior art.
2. The following is an examiner's statement of reasons for allowance:

Regarding claim independent claim 1, it contains the objected subject matter of previous claim 2.

Regarding independent claim 10, it contains the objected subject matter of previous claims 12 & 13.

Regarding independent claim 14, it was the previous objected claim 14 made independent.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lana N Le whose telephone number is (703) 308-5836. The examiner can normally be reached on M-F 10-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F Urban can be reached on (703) 305-4385. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Lana Le", with a stylized flourish at the end.

Lana Le

June 14, 2004